EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-fourth Meeting
Montreal, 7-11 April 2008

CFC MANAGEMENT AND ACCELERATED CFC PRODUCTION CLOSURE, A PROPOSAL FROM THE GOVERNMENT OF INDIA TO RETURN TO COMPLIANCE WITH THE CONSUMPTION SECTOR AGREEMENT IN 2008 – 2009

A PRELIMINARY REVIEW BY THE SECRETARIAT
Introduction

1. On 10 March 2008, the Secretariat received through the World Bank, a submission by Meena Gupta, Secretary from the Indian Ministry of Environment and Forests, entitled CFC Management and Accelerated CFC Production Closure. This was done in response to decision 53/13 where the Executive Committee “decided to discuss the issue of India’s CFC consumption in 2006 and its relation to performance-based agreements at the 54th Meeting of the Executive Committee”. The submission includes a letter from the Secretary to the Chief Officer and a project proposal from the World Bank (attached).

2. Since the submission reached the Secretariat one day before the dispatch of documents to members of the Executive Committee, and covered a number of complex issues, the Secretariat did not have the time to complete the normal review process which usually includes sending queries to, and receiving replies from, the implementing agency. Therefore the write-up can only be a preliminary review of the submission by the Secretariat and is intended to bring out the main issues to assist in focusing the discussion of the Executive Committee.

Project description

3. As background, the proposal shows the commitments of India to phase out CFC production and consumption under the Montreal Protocol and under the agreements with the Executive Committee.

<table>
<thead>
<tr>
<th>Row</th>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Production Limit (MP)</td>
<td>22,632.4</td>
<td>11,316.2</td>
<td>11,316.2</td>
<td>3,394.9</td>
<td>3,394.9</td>
<td>3,394.9</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Production Limit (EC)</td>
<td>13,176.0</td>
<td>11,294.0</td>
<td>7,342.0</td>
<td>3,389.0</td>
<td>2,259.0</td>
<td>1,130.0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Consumption Limit (MP)</td>
<td>6,681.0</td>
<td>3,340.5</td>
<td>3,340.5</td>
<td>1,002.2</td>
<td>1,002.2</td>
<td>1,002.2</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Consumption Limit (EC)</td>
<td>3,489.0</td>
<td>2,266.0</td>
<td>1,560.0</td>
<td>964.0</td>
<td>417.0</td>
<td>273.0</td>
<td>0</td>
</tr>
</tbody>
</table>

4. The submission also indicates the importance of exports to enable India to comply with these commitments and these are shown in Table 2.

<table>
<thead>
<tr>
<th>Row</th>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
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<td>2,259.0</td>
<td>1,130.0</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Consumption Limit (EC)</td>
<td>3,489.0</td>
<td>2,266.0</td>
<td>1,560.0</td>
<td>964.0</td>
<td>417.0</td>
<td>273.0</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Export Limit (Mandatory Min.)</td>
<td>9,687.0</td>
<td>9,028.0</td>
<td>5,782.0</td>
<td>2,425.0</td>
<td>1,842.0</td>
<td>857.0</td>
<td>-</td>
</tr>
</tbody>
</table>

5. The proposal also informs that to ensure that domestic CFC consumption does not exceed the target set in the consumption sector agreement, an administrative order was issued in the
beginning of 2007 to limit domestic sales by the CFC producers to the annual consumption target level. Any amount beyond the limit has to be exported by the producers with a permit.

**Over-consumption in 2006 and 2007**

6. It is acknowledged that with a verified CFC production of 6,964 ODP tonnes in 2006, India complied with the target in the CFC production sector agreement with the Executive Committee. However, its 3,411.8 ODP tonnes of consumption in 2006, as reported under Article 7, exceeded both the Montreal Protocol limit of 3,340.5 ODP tonnes and the target of 1,560 ODP tonnes set in the CFC consumption sector agreement.

7. The situation in 2007 is described as similar to that in 2006 although the data used are not quoted as those reported under Article 7. While CFC production at 2,346 ODP tonnes is below the target of the production sector agreement, the 1,356.03 ODP tonnes of consumption both exceed the Montreal Protocol limit of 1,002 ODP tonnes and the target of 964 ODP tonnes set in the CFC consumption sector agreement.

8. The submission provides data on the CFC production, consumption, exports and inventory in 2007 to show that out of the total exports of 1,310 ODP tonnes, 990.63 ODP tonnes are from the 2007 production and 319.37 ODP tonnes from the 2006 inventory. If the CFC consumption of 3,411.8 ODP tonnes is about 71 ODP tonnes higher than the Montreal Protocol limit of 3,340.5 ODP tonnes in 2006, that over-consumption was intended as exports to meet the domestic needs of Article 5 countries in future years and the exports actually took place in 2007.

9. The submission then cites decision XVIII/17 of the 18th Meeting of the Parties covering the non-compliance situations in 2006 and 2007, specifically the circumstance where ODS produced exceeded the allowed level of production or consumption for a given year but had been stockpiled for export to meet basic domestic needs of developing countries in a future year. The interpretation of the decision offered by the submission is to defer consideration of Parties’ non-compliance but not to redefine the level of consumption or production.

10. The submission further cites decision XV/39 of the 15th Meeting of the Parties regarding the treatment of an illegally traded quantity of CFCs, and decision XVI/27 of the 16th Meeting of the Parties regarding the timing of treating ODS stocks as consumption, which should be at the time the stocks are drawn down. In the case of India, the Government has issued administrative orders which prohibit the movement of CFCs in the market without the government licenses.

11. India also requests the Executive Committee not to apply the penalty clause of the agreement to the CFC over-consumption in 2006 and 2007 in light of the intent of paragraph 1 of decision XVIII/16 of the 18th Meeting of the Parties, since the over-consumption was consumed in the MDI sector.

**Action plan to return to compliance in 2008 and 2009**

12. The proposal, CFC management and accelerated CFC production closure sets as its objectives:

- To assist India to return to compliance with the consumption agreement between the Executive Committee and India in 2008 and 2009;
• To accelerate the CFC production phase-out in India to no later than 31 July 2008; and
• To ensure that the accelerated CFC production phase-out will support the phase-out in the consumption sector.

13. The action plan includes a number of policy measures to be implemented immediately, such as:

(a) Amendment of the consumption schedule of the Ozone Rules in line with the Executive Committee agreement;
(b) Establishment of a system to ensure future years production and domestic consumption quotas are well coordinated;
(c) Imports of CFCs for the MDI sector will be treated consistently under the existing CFC licensing system; and
(d) Strengthening of the system for monitoring movement of CFC stocks and imports, if any.

14. For industry actions, emphasis is being placed on linkages between CFC production and consumption. For production, a proposal is put forward to produce another 690 mt up to 31 July 2008 and terminate CFC production for good thereafter provided additional funding is given. The CFC producers will dispose of any CFC stocks existing as at the end of 2009.

15. To meet the CFC demand for MDIs and servicing, MDI producers will provide their demand forecast for 2008 and 2009 to the Government by May 2008. The Government will issue domestic sale quotas from newly produced CFCs and stockpiles to meet these demands and those for servicing. These combined actions are believed to place India back to within the limits of the Montreal Protocol and the agreements with the Executive Committee in 2008 and 2009.

16. For the accelerated CFC production phase-out, two options are being proposed. The first one is the so-called accelerated phase-out of CFC production for the domestic market, which maintains the current CFC production as stipulated in the CFC production agreement in 2008 and 2009 but to limit the domestic sales to 690 mt in total and export the balance. This is best illustrated in the table below:

<table>
<thead>
<tr>
<th>Production Schedule</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Targets as per the Consensus Agreement</td>
<td>2,259.0</td>
<td>1,130.0</td>
</tr>
<tr>
<td>Production Targets for the Domestic Sales</td>
<td>417.0</td>
<td>273.0</td>
</tr>
<tr>
<td>Production Targets for the Export Market</td>
<td>1,842.0</td>
<td>857.0</td>
</tr>
<tr>
<td>Production for Stocks</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

17. Since there is no reduction proposed in the CFC production level in 2008 and 2009, no additional funding expected from the Multilateral Fund.
18. The second option is to reduce the CFC production in 2008 and 2009 from 3,389 mt to 690 mt and advance the phase-out completion date from 2010 to 31 July 2008. The compensation sought for the 2,699 mt of CFCs avoided is US $20.58 million. This sum has been calculated from a profit forgone from 2,053 mt of exports and 646 mt of domestic sales.

19. For the domestic sales, a CFC price of US $11.18/kg is used, which is admittedly substantially higher than the international prices and a number of items under cost of production are assumed to be zero. For the international sales, the calculation is based on the international prices of pharmaceutical-grade CFCs at US $7.5/kg based on the argument that in the past few years the export market has shifted to such products. The details of the calculations are shown in the table below:

<table>
<thead>
<tr>
<th>Production Schedule</th>
<th>2008</th>
<th>2009</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Targets as per the Consensus Agreement</td>
<td>2259</td>
<td>1130</td>
<td>MT</td>
</tr>
<tr>
<td>Ozone Rules Consumption Limit</td>
<td>668</td>
<td>668</td>
<td>MT</td>
</tr>
<tr>
<td>Proposed Production Targets for Consumption Sector</td>
<td>690</td>
<td>0</td>
<td>MT</td>
</tr>
<tr>
<td>Allowable Production Level for Export</td>
<td>1591</td>
<td>462</td>
<td>MT</td>
</tr>
<tr>
<td>Reduction of Production for the Consumption Sector</td>
<td>0</td>
<td>646</td>
<td>MT</td>
</tr>
<tr>
<td>Reduction of Production for Export</td>
<td>1591</td>
<td>462</td>
<td>MT</td>
</tr>
<tr>
<td>Loss of Profit from Domestic Sales</td>
<td>0</td>
<td>$6,706</td>
<td>000's US$</td>
</tr>
<tr>
<td>Loss of Profit from Export</td>
<td>$10,598</td>
<td>$3,077.52</td>
<td>000's US$</td>
</tr>
</tbody>
</table>

### COMMENTS OF THE SECRETARIAT

**Data discrepancy**

20. The CFC consumption in 2006 quoted in the project proposal at 3,411.8 ODP tonnes is different from the 3,560.3 ODP tonnes as published by the Ozone Secretariat. The Secretariat checked the data used in Table 5, CFC production and consumption and movement of the CFC stockpile in 2007, against the data in the 2007 CFC production verification submitted by the World Bank and found the following discrepancy as set out in the table below:
Interpretation of decisions XVIII/16, XVIII/17, XV/39 and XVI/27 of the Meetings of the Parties and their applicability to the case of India

21. The submission offers interpretations of decisions XV/39, XVI/27 and XVIII/17 of the Meetings of the Parties in defense of the CFC consumption in 2006 exceeding the limit of the Montreal Protocol. This relates in particular to decision XVIII/17 with regard to the treatment of ODS exports in a future year. Since interpretations of decisions of the Meetings of the Parties is the prerogative of the Meetings of the Parties itself, the Fund Secretariat would need to defer to the Ozone Secretariat for an opinion on the interpretations offered in the submission.

22. While the same is true with regard to decision XVIII/16 on the importance of phasing out CFCs in the MDI sector, it is relevant to recall the discussion of the Executive Committee at its 53rd Meeting on this issue, and for that paragraph 80 from the Report of the 53rd Meeting (UNEP/OzL.Pro/ExCom/53/67) is reproduced below:

“An informal group composed of the representatives of Canada, acting as facilitator, China, Italy, Sweden, the United States of America and Uruguay, as well as Germany as the bilateral agency, the World Bank as implementing agency for the CFC production phase-out project and representatives of the Secretariat, met on several occasions to discuss possible solutions. In his report to the Executive Committee, the facilitator said that most members of the group wished to note the seriousness of the situation regarding compliance with the agreement between India and the Executive Committee, in which India had significantly exceeded its 2006 CFC consumption target. The Government of India should be advised that, under the terms of the agreement, the penalty for exceeding its CFC consumption target in 2006 was estimated at more than US $27 million, which would have to be recovered by the Multilateral Fund. Those Members also wanted to confirm that the consumption of CFCs for MDIs was considered to be part of its CFC consumption under the agreement, and that stockpiling of CFCs in 2006 for MDIs, and
for servicing and exports in subsequent years was also considered to be part of its CFC consumption under the agreement. The Government of India should be urged to undertake all necessary steps to ensure future compliance with the provisions of the agreement and to submit the outstanding parts of its verification report under the agreement eight weeks prior to the 54th Meeting of the Executive Committee. On the other hand, one member of the informal group believed that, in accordance with decision XVIII/17 of the Eighteenth Meeting of the Parties, India should be given a chance to comply with the agreement. After presentation of the report, one Member expressed the view that the Executive Committee should seek ways to help India rather than penalize it, perhaps by developing a plan to destroy its stockpile and thus return it to compliance.”

Likely size of penalty for exceeding agreement targets in 2006 and 2007

23. Using the data from the submission, the likely size of the penalty for not meeting the CFC consumption targets in 2006 and 2007 could be approximately US $34 million. This is calculated as follows:

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual CFC consumption</td>
<td>3,411.78 ODP tonnes</td>
<td>1,356.03 ODP tonnes</td>
</tr>
<tr>
<td>Target in the Agreement</td>
<td>1,560.00 ODP tonnes</td>
<td>964.00 ODP tonnes</td>
</tr>
<tr>
<td>Over the target</td>
<td>1,851.78 ODP tonnes</td>
<td>392.03 ODP tonnes</td>
</tr>
<tr>
<td>Penalty per ODP tonne</td>
<td>US $14,960</td>
<td>US $14,960</td>
</tr>
<tr>
<td>Likely penalty</td>
<td>US $27.7 million</td>
<td>US $5.86 million</td>
</tr>
</tbody>
</table>

24. Of the two options for accelerating the CFC production phase-out, the first option does not result in any acceleration or further reduction in production. The only difference from the status quo is to limit the domestic sales and place the balance on the export market.

25. The calculation of the additional compensation for accelerating the production phase-out under option 2 uses some unusual parameters. First a number of items under cost of production are assumed to be zero and the argument is that the level of production is low and consequently the cost of labour, maintenance and other aspects are not taken into account. This is a rather generous assumption, considering the amount of CFC production under discussion is approximately 2,700 mt. On the other hand, the prices of CFCs quoted are quite high. First a higher protected domestic price of US $11.18/kg is used for the assumed domestic sales, and US $7.5/kg is used for the high-end pharmaceutical-grade CFCs for export. However it has not been the practice of the Multilateral Fund to use different domestic and export prices to calculate compensation for ODS production phase-out, but to use international prices under the assumption of an open economy.

26. As a result of using higher prices and lower cost of production, the requested additional funding of US $20.58 million is unusually high. To put the request in perspective, a cost comparison is done of all the CFC production phase-out projects funded by the Multilateral Fund, using CFC production baseline as the common denominator.
Table 7

Cost comparison of funded CFC production phase-out projects

<table>
<thead>
<tr>
<th>Country</th>
<th>Baseline ODP tonnes</th>
<th>Approved funding US $</th>
<th>US $/ODP tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>47,004.0</td>
<td>150 Million</td>
<td>3,191</td>
</tr>
<tr>
<td>China APP</td>
<td>12,000.0</td>
<td>10 Million</td>
<td>833</td>
</tr>
<tr>
<td>China + APP</td>
<td>47,004.0</td>
<td>160 Million</td>
<td>3,404</td>
</tr>
<tr>
<td>Argentina</td>
<td>2,745.0</td>
<td>8.3 Million</td>
<td>3,024</td>
</tr>
<tr>
<td>Argentina APP</td>
<td>1,372.0</td>
<td>2.3 Million</td>
<td>1,676</td>
</tr>
<tr>
<td>Argentina + APP</td>
<td>2,745.0</td>
<td>10.6 Million</td>
<td>3,862</td>
</tr>
<tr>
<td>Mexico</td>
<td>11,042.0</td>
<td>31.85 Million</td>
<td>2,884</td>
</tr>
<tr>
<td>Venezuela</td>
<td>4,789.0</td>
<td>16.5 Million</td>
<td>3,445</td>
</tr>
<tr>
<td>India</td>
<td>22,362.0</td>
<td>82 Million</td>
<td>3,623</td>
</tr>
<tr>
<td>India APP</td>
<td>2,699.0</td>
<td>20.58 Million*</td>
<td>7,625</td>
</tr>
<tr>
<td>India + APP</td>
<td>22,362.0</td>
<td>102.58 Million</td>
<td>4,587</td>
</tr>
</tbody>
</table>

* Requested funding

RECOMMENDATIONS

27. The Executive Committee may wish to consider this proposal together with the request of the World Bank for the 2008 annual tranche of the CFC production sector plan and the request from Germany for the 2008 annual work programme of the CFC consumption phase-out plan, which are both submitted to this meeting.
Dear Ms. Nolan,

The Government of India would like to request the Multilateral Fund Secretariat to inform the Executive Committee at its 54th Meeting, of the Government of India’s actions in response of Decision 53/13 to ensure future compliance with the provisions of the consumption sector agreement.

First of all, the Government of India would like to express its continued commitment to the objectives and obligations of the Montreal Protocol as well as all the terms and conditions under the consumption sector agreement and others that the Government of India has entered into with the Executive Committee of the Multilateral Fund. Recognizing the seriousness of the situations experienced in 2006 and 2007 in the consumption sector and the advice provided in Decision 53/13, the Government of India, as part of its plan to return to full compliance, has not issued any CFC production quotas for the CY 2008. In the meantime, the Government of India has entered into a series of dialogues with the key stakeholders including CFC producers.

To ensure full compliance with all terms and conditions of all agreements between India and the Executive Committee and Montreal Protocol obligations pertaining to CFCs production and consumption, an integrated action plan that includes “CFC Management and Accelerated Production Closure”, addressing the need of the consumption and production sectors has been formulated and is being submitted along with this letter for the consideration of the ExCom at its 54th Meeting in April 2008.

From 1 August 2008, CFC production will be prohibited. This represents the closure of the last CFC production facilities in Article 5 country Parties to the Montreal Protocol. Therefore, total CFC production amounting to 2,699 MT will be avoided. Moreover, the plan of action as submitted by India will ensure that the total aggregated CFC consumption in India from the period 2004 – 2009 will not exceed 6,150 MT, which is 2,820 MT lower than the aggregated consumption level as per the consumption agreement, and about 7,400 MT less than the Montreal Protocol target.
According to this proposed plan, additional production of virgin CFCs, of not more than 690 MT will be produced prior to 31 July 2008. By May 2008, MDI manufacturers must confirm with the Government of India on the exact quantity of CFCs that will be required for 2008, 2009 and beyond. This would give predictability to the Government of India on the production level of CFCs and the level of CFCs in the stockpile that has to be exported. The Government of India will submit separately an integrated CFC phase-out plan for the MDI sector for the ExCom’s consideration at the 55th Meeting.

Residual demand of CFCs, if any, will be met from the existing stock. Taking into account CFC demand in critical consumption sectors in other Article 5 countries prior to complete phase-out, the existing stock of CFCs will also be utilized to meet this critical demand.

The detailed action plan to return to compliance with the consumption sector agreement in 2008 and 2009 comprising of a series of policy measures and industry actions to address the production and consumption sectors, along with a proposal “CFC Management and Accelerated CFC Production Closure” are included as attachments to this letter.

To assist India to undertake these challenging tasks, India would request the ExCom to continue to provide the needed financial support to all phase-out programs and activities in India. India would request the ExCom to consider that while India’s consumption in 2006 is mathematically higher than the agreed target, about 90% of the quantity representing excess consumption in 2006 was not physically consumed or released in 2006.

It is also important to point out that part of the causes contributing to the difficult situations experienced by the consumption sector in India in 2006 is the increasing demand of CFC MDI products. While CFC consumption in the MDI sector is critical to India and other developing countries, India as a committed Party to the Protocol is doing its utmost to manage the phase-out of its CFC dependence in an expeditious manner. As mentioned previously, a sector plan for phasing out CFCs in the MDI sector will be submitted for the consideration of the ExCom at its 55th Meeting. As recognized by the Parties of the Montreal Protocol, CFC MDI products are essential and critical to health conditions of a large population particularly those in Article 5 countries. Decision XVIII/16 requests the ExCom to consider as a matter of urgency to provide financial support to countries experiencing difficulties due to high consumption of CFCs for manufacturing MDIs.
The Government of India would like to assure the ExCom that India is doing its utmost to return to compliance with all obligations under the Montreal Protocol and ExCom’s agreements. This is demonstrated by India’s commitment and determination to carry out all activities described in the action plan and the proposed accelerated production closure.

The Government of India would also like to take this opportunity to thank the Multilateral Fund Secretariat for facilitating the submission of the action plan and accelerated production closure project for the consideration of the 54th Meeting of the ExCom.

With regards,

Yours sincerely,

(Meena Gupta)

Ms. Maria Nolan,
Chief Officer
Secretariat of the Multilateral Fund
for the Implementation of the Montreal Protocol
1800 McGill College, 27th Floor
Montreal, Quebec, H3A 3J6; Canada
Tel: 1 + (514) 282-1122;
Fax: 1 + (514) 282-0068
E-mail: maria.nolan@unmfs.org

2. Project Document on CFC management and Accelerated CFC Production Closure
ATTACHMENT I

Action Plan to Return to Compliance with the Consumption Sector Agreement in 2008 – 2009

1. **Action Plan** – To ensure compliance with the consumption sector agreement in the future years, India agrees to take a holistic approach to manage CFCs in both the production and consumption sectors by focusing on these two areas:

   a) Inter-linkage between production and consumption; and
   b) CFC management plan to support CFC phase-out in the servicing sector and the MDI sector.

2. **Policy Measures** – To address those issues listed in para 1 effectively, the following policy measures will be put in place in an expeditious manner:

   a) Amendment of the consumption schedule of the Ozone Rules in line with the ExCom agreement;
   b) Establishment of a system to ensure future years production and domestic consumption quotas are well coordinated;
   c) Imports of CFCs for the MDI sector will be treated consistently under the existing CFC licensing system; and
   d) Strengthening of the system for monitoring movement of CFC stocks and imports, if any.

3. As part of the effort to amend the Ozone Rules as described above, the Government of India will take this opportunity to explore possibility of incorporating the recent adjustments of the Montreal Protocol pertaining to control measures on HCFCs to the Ozone Rules.

4. **Industry Action** – CFC producers are expected that they will properly manage or dispose of any CFC stockpile remaining at the end of 2009. Producers of CFC also agree to undertake an accelerated CFC production phase-out by limiting their CFC production from 1 January – 31 July 2008 to 690 MT, which is the combined consumption limits of 2008 and 2009 stipulated in the consumption agreement of the Excom, provided that additional funding, above and beyond the funding level of the consensus agreement for the CFC production sector, is provided by the MLF.

5. **Inter-linkage Between the Production and Consumption Sectors** – Recognizing the consumption limits as per the consumption agreement, India will ensure that:

   a) Total consumption of CFCs in 2008 and 2009 will be within the limits of the consumption sector agreement;
b) Any new production of CFCs as mentioned in the above paragraph will be used to meet residual demand;
c) In case CFC demand for the MDI sector is less than the 690 MT level, the balance from the 2008 – 2009 consumption limits could be used for meeting the demand in the servicing sector.

6. In addition, the Government of India will step up the implementation recovery and recycling activities under the consumption sector project. India will also step up its effort to promote adoption of the good practices in the refrigeration and air-conditioning servicing sectors to reduce refrigerant leakage.

7. **CFC Management** – As previously mentioned, any CFC stockpile remaining at the end of 2009 will be properly managed or disposed of by CFC producers. To allow CFC producers to implement a proper CFC management plan in a cost-effective manner, predictability of the CFC demand in the MDI sector is very critical. The quantity required by the MDI sector in 2008 and 2009 will determine the level of CFCs for the servicing sector that could be drawn from the existing stock. It will also determine the levels of CFC exports for 2008 and 2009 to minimize the costs of managing unwanted CFCs at the end of 2009. In this regard, it is agreed that:

a) MDI producers will confirm their CFC demand for 2008 and 2009 as soon as possible;
b) MDI producers will provide the Government of India with requirement of CFC to be purchased;
c) Production and domestic sale quotas of newly produced CFCs and stockpiled CFCs would be issued accordingly.
PROJECT COVER SHEET

COUNTRY: India

IMPLEMENTING AGENCY: The World Bank

PROJECT TITLE: CFC Management and Accelerated CFC Production Closure

PROJECT IN CURRENT BUSINESS PLAN: No

SECTOR/SUB-SECTOR

TOTAL ODS PRODUCTION:
2008: 2,259 ODP tons (Annex A, Group I)
2009: 1,130 ODP tons (Annex A, Group I)

PROJECT IMPACT:
Annex A, Group I: 2,699 ODP tons

PROJECT DURATION:
6 Months

PROJECT COSTS:
Investment Activities:
- Incremental Capital Cost: US$ 20.38 million
- Contingency (10%): Included above
- Incremental Operating Cost: Not included
- Technical Assistance Component: US$ 0.20 million
- Sub-total: US$ 20.58 million

Total Project Cost: US 20.58 million

LOCAL OWNERSHIP: 100%

EXPORT COMPONENT: N/A

TOTAL REQUESTED MLF GRANT:
Investment: US$ 20.38 million

IMPLEMENTING AGENCY SUPPORT COST: US$ 1,528,500

OVERALL COST-EFFECTIVENESS: US$ 7.55 /kg ODP

STATUS OF COUNTERPART FUNDING: Submission requested by the Government of India

PROJECT MONITORING/MILESTONES: Included

NATIONAL COORDINATING AGENCY: Ministry of Environment and Forests

PROJECT SUMMARY

The CFC Management and Accelerated CFC Production Closure Project will result in early closure of all CFC producers in India by 31 July 2008. The Government of India and its producers agreed that with the additional funding provided by this project, in addition to the funding level that had already been agreed to in the consensus agreement, the maximum level of production from 1 January – 31 July 2008 will not exceed 690 MT. It is also agreed that the CFC producers will be responsible to ensure that the stockpile at the end of 2007 will be reduced to zero by 31 December 2009.

Recognizing the importance of CFCs to the MDI sector and the public health sector of India, the MDI sector will have priority for the supply of CFCs to be produced in 2008. India would like to use the existing stock to supply domestic residual demand. In addition, imports of CFCs for the MDI sector will be treated consistently under the existing CFC licensing system.

Total CFC production amounting to 2,699 MT will be avoided. This proposed plan will ensure that the total aggregated CFC consumption in India from 2004 – 2009 will not exceed 6,150 MT, which is 2,820 MT lower than the aggregated consumption level as per the consumption sector agreement, and about 7,400 MT less than the Montreal Protocol target.

IMPACT OF PROJECT ON COUNTRY’S MONTREAL PROTOCOL OBLIGATIONS

The project will enable the Government of India to meet all its Montreal Protocol obligations pertaining to Annex A Group I chemicals and all other multiyear agreements between the ExCom and India.

Prepared by: The Government of India and the World Bank Date: 3.7.2008
Project Objectives

1. The objectives of the proposed project include:

   1. To assist India to return to compliance with the consumption agreement between the ExCom and India, in 2008 and 2009;
   2. To accelerate the CFC production phase-out in India to no later than 31 July 2008; and
   3. To ensure that the accelerated CFC production phase-out will support the phase-out in the consumption sector.

Country Background

2. India, as a Party operating under paragraph 1 of Article 5, is obliged to reduce its production and consumption levels to the respective baseline levels (average of 1995 – 1997) by 1999, and to reduce its production and consumption levels to 50% and 85% of its baseline levels by 2005 and 2007, respectively. India is required to completely phase out its production and consumption of CFCs by 1 January 2010.

3. The production and consumption levels as per the Montreal Protocol requirement are shown in rows 1 and 3 in Table 1.

<table>
<thead>
<tr>
<th>Row</th>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Production Limit (MP)</td>
<td>22,652.4</td>
<td>11,316.2</td>
<td>11,316.2</td>
<td>3,394.9</td>
<td>3,394.9</td>
<td>3,394.9</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Production Limit (EC)</td>
<td>13,176.0</td>
<td>11,294.0</td>
<td>7,342.0</td>
<td>3,389.0</td>
<td>2,259.0</td>
<td>1,139.0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Consumption Limit (MP)</td>
<td>6,681.0</td>
<td>3,340.5</td>
<td>3,340.5</td>
<td>1,002.2</td>
<td>1,002.2</td>
<td>1,002.2</td>
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<tr>
<td>4</td>
<td>Consumption Limit (EC)</td>
<td>3,489.0</td>
<td>2,266.0</td>
<td>1,560.0</td>
<td>964.0</td>
<td>417.0</td>
<td>273.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1. Production and Consumption Targets for India as per the Montreal Protocol and the Agreements of the Multiyear Agreements between India and the ExCom.

4. At the 29th Meeting of the ExCom, a consensus agreement for the Indian production sector was approved. Under this consensus agreement, India agrees to reduce its production level of Annex A Group I chemicals (CFCs) in accordance with the targets shown in row 2 of Table 1. For the purpose of this proposal, the production targets as per the consensus agreement from 1999 – 2003 were not included.

5. At the 42nd Meeting of the ExCom, more than four years after the approval of the consensus agreement for the Indian production sector was approved, the ExCom approved an agreement between India and the ExCom for the national phase-out of CFC consumption in India focusing on the refrigeration service sector. As part of this agreement, India has agreed to phase out its consumption of CFCs in accordance with the schedule shown in row 4 of Table 1. These consumption targets represent the total CFC consumption in all sectors in India including the foam, refrigeration manufacturing and servicing sectors. (The MDI sector was excluded from this agreement as the eligible CFC consumption for the MDI sector had been transferred to the consumption sector project, and India had agreed not to submit any MDI investment projects in the future – Dec. 41/31.) Further, the Executive Committee at its 52nd meeting considered the
information provided by the Government of India in response to the decision 51/34 and the request for project preparation funding for phase-out of CFC in MDI sector and approved US$100,000.

6. It should be noted that the targets for both production and consumption under the multiyear agreements are lower than the applicable targets under the Montreal Protocol. This presents a scenario for India to be in compliance with the Montreal Protocol obligations but not with the agreements between India and the ExCom.

7. It is also important to point out that as India is one of the major exporters of CFCs to other Article 5 countries, the levels of production and consumption are therefore not necessarily the same. The difference between the production and consumption represents in most cases the exported quantity of CFCs. If the production targets as per the consensus agreement and the consumption targets as per the national CFC consumption phase-out agreement are fully utilized, the difference between the two corresponding targets must be exported within the year for which the targets relate. The same applies to the production and consumption targets as per the Montreal Protocol requirements.

<table>
<thead>
<tr>
<th>Row</th>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Production Limit (EC)</td>
<td>13,176.0</td>
<td>11,294.0</td>
<td>7,342.0</td>
<td>3,389.0</td>
<td>2,259.0</td>
<td>1,330.0</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Consumption Limit (EC)</td>
<td>3,489.0</td>
<td>2,266.0</td>
<td>1,560.0</td>
<td>964.0</td>
<td>417.0</td>
<td>273.0</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Export Limit (Mandatory Min.)</td>
<td>9,687.0</td>
<td>9,023.0</td>
<td>5,782.0</td>
<td>2,425.0</td>
<td>1,842.0</td>
<td>857.0</td>
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</tr>
</tbody>
</table>

Table 2. Export Limit as a result of the difference between the production and consumption targets

**Government’s System for Controlling the Movement of CFCs**

8. To ensure that the total quantity of CFCs to be placed in the domestic market would not exceed the levels allowed by the consumption sector agreement, the Government of India has, since the beginning of 2007, issued an administrative order indicating the quantity up to the annual limit of the consumption sector agreement that could be placed in the domestic market to all CFC producers.

9. In case any part of the production beyond the domestic demand but within the production limit is intended for the export market, the producers would have to obtain export permits from the Ozone Cell.

**2006 and 2007 CFC Consumption and Production Situations of India**

10. The actual CFC production level as verified by the World Bank is 6,964 MT against the 2006 production target of the consensus agreement of 7,342 MT. Upon an approval of the ExCom of the 2006 CFC production verification report and the 2007 Annual Work Program, which are the two conditions for disbursement under the consensus agreement, the funding tranche for 2007 was approved and released by the ExCom. Subsequently, the Government of India submitted its 2006 Article 7 data report to the Ozone Secretariat indicating that its consumption level of 2006 is 3,411.8 ODP tons.
11. While India is in compliance with the production target of the consensus agreement for the CFC production sector, the consumption level (3,411.8 ODP tons) exceeds the limit stipulated by the National CFC Consumption Phase-out Agreement (1,560 ODP tons) as well as the Montreal Protocol limit (3,340.5 ODP tons).

12. It is important to note that the 2006 CFC production verification confirmed a stockpile of 1,682.459 ODP tons remaining at the end of 2006 of which, 219 MT was declared by the Government of India in accordance with Decision XVIII/17 that this quantity is intended for export in a future year. The 2006 consumption minus the 219 MT intended for export in a future year is 3,192.8 MT. Aside from this stockpile, which was not made available to the market, the actual excess consumption in 2006 is 169.34 MT dedicated for the MDI sector. Therefore, the total quantity of CFCs that were physically consumed in 2006 is 1,729.34 MT. The breakdown of CFC consumption and production in 2006 is shown in Table 3.

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Production</td>
<td>6,963.36</td>
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<tr>
<td>Feedstock Use</td>
<td>54.98</td>
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<tr>
<td>Actual Production (MP)</td>
<td>6,908.38</td>
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<tr>
<td>Import</td>
<td>111.00</td>
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<tr>
<td>Export</td>
<td>3,607.58</td>
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<tr>
<td>Actual Consumption (MP)</td>
<td>3,411.80</td>
</tr>
<tr>
<td>Quantity physically consumed</td>
<td>1,729.34</td>
</tr>
<tr>
<td>NCCOPP Limit</td>
<td>1,560.00</td>
</tr>
<tr>
<td>Additional from local production for MDI</td>
<td>58.34</td>
</tr>
<tr>
<td>Additional from Import for MDI</td>
<td>111.00</td>
</tr>
<tr>
<td>Closing Stock</td>
<td>1,682.46</td>
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<tr>
<td>Future Year Consumption</td>
<td>1,463.46</td>
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<tr>
<td>Future Year Export</td>
<td>219.00</td>
</tr>
</tbody>
</table>

Table 3 Summary of CFC Production and Consumption in 2006

13. The 2007 CFC production verification confirmed that the total quantity sold by the producers plus captive use was 2,666 MT. It was also reported separately that 1,310 MT was exported. Out of this total export quantity of 1,310 MT, 319.37 MT was drawn from the 2006 stock. The 319.37 MT quantity is about 100 MT higher than the 219 MT quantity reported in 2006 as a stock for export in a future year. The total domestic sales in 2007 after excluding the export quantity were 1,356.03 MT. This volume is in excess of the consumption target by 392.03 MT. The breakdown of domestic sales in 2006 and 2007 is summarized in Table 4. The stock at the end of 2007 as confirmed by the 2007 CFC production verification is 1,363.09 MT, which is 319.35 MT lower from the 2006 stock. Table 5 provides a brief summary of 2007 production and consumption as well as movement of CFC stockpile.

1 It is important to note that part of the NCCOPP limit of 1,560 MT was also consumed by the MDI sector.
14. At the beginning of the year, the Ozone Cell only issued an administrative order to all CFC producers indicating that the limit of the domestic sale quantity is 964 MT\(^2\) for 2007. During the course of the year, requests were made by the MDI industry that an additional quantity of 500 MT was required to meet the demand of CFC MDI products. Because of the potentially significant adverse health impact that could be caused by insufficient supply of CFC MDI products and the fact that the consumption agreement did not address any consumption in the MDI sector, the Ozone Cell was compelled to issue another administrative order in September 2007 to allow CFC producers to supply an additional quantity of up to 500 MT to the MDI producers for which 392.03 MT was actually supplied.

15. On the issue of stockpiles, it was mentioned above that the stock is depleting. Moreover, the remaining stock is still being kept out of the market as movement of this material is prohibited unless proper sale or export permits or administrative orders are issued by the Ozone Cell.

\(^2\) This quantity was consumed by both the servicing sector and MDI sector.

**Implications of the Existing Decisions of the Meeting of the Parties and the Executive Committee to the 2006 and 2007 CFC Consumption Situations**

<table>
<thead>
<tr>
<th>Sales from Initial Domestic Sale Quotas (MT)</th>
<th>Sales from Additional MDI Quotas (MT)</th>
<th>Total Domestic Sales (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 Domestic Sales</td>
<td>1,560.00</td>
<td>1,729.34</td>
</tr>
<tr>
<td>2007 Domestic Sales</td>
<td>964.00</td>
<td>1,356.03</td>
</tr>
</tbody>
</table>

**Table 4 Domestic Sales of CFCs in 2006 and 2007**

<table>
<thead>
<tr>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock</td>
</tr>
<tr>
<td>Acual Production</td>
</tr>
<tr>
<td>Actual Sales + Captive Use</td>
</tr>
<tr>
<td>Export</td>
</tr>
<tr>
<td>Export from Stock</td>
</tr>
<tr>
<td>Export from New Production</td>
</tr>
<tr>
<td>Actual Consumption (MP)</td>
</tr>
<tr>
<td>Quantity physically consumed</td>
</tr>
<tr>
<td>NCCOPP Limit</td>
</tr>
<tr>
<td>Additional MDI Quota</td>
</tr>
<tr>
<td>Closing Stock</td>
</tr>
</tbody>
</table>

**Table 5 CFC Production and Consumption and Movement of CFC Stockpile in 2007**

- Opening Stock: 1,682.46
- Actual Production: 2,346.68
- Actual Sales + Captive Use: 2,666.03
- Export: 1,310.00
- Export from Stock: 319.37
- Export from New Production: 990.63
- Actual Consumption (MP): 1,255.68
- Quantity physically consumed: 1,356.03
- NCCOPP Limit: 964.00
- Additional MDI Quota: 392.03
- Closing Stock: 1,363.09
16. As it has been experienced by some producing countries, both Article 5 and non-Article 5 Parties, that certain quantities of controlled substances produced in one calendar year may not be fully exported within the year the substances were produced. However, these stockpiles are intended for export in future years. This case and other similar practical difficulties regarding treatment of stockpiled ODS relative to compliance were considered by the 18th Meeting of the Parties in 2006 in India. Having reviewed these cases, the Parties decided (Dec. XVIII/17):

- to request the Secretariat to maintain a consolidated record of the cases in which the Parties have explained that their situations are the consequence of ODS production in that year which has been stockpiled for export to meet basic domestic needs of developing countries in a future year, or any other similar cases (refer to Dec. XVIII/17), and incorporate that record in the documentation of the Implementation Committee, for information purposes only, as well as the Secretariat’s report on data submitted by the Parties in accordance with Article 7 of the Protocol.

17. While interpretation of Parties’ decisions including Dec. XVIII/17 is within the sovereign right of the Parties concerned, it is important, however, to point out that Dec. XVIII/17 does not include any specific language or provision for Parties to redefine the definition of consumption or production. According to the agreed text of Dec. XVIII/17, it could therefore be interpreted that the decision is triggered when the excess quantity of CFC produced in one year but destined for export in a future year, may lead to non-compliance of any particular Parties. The effect of Dec. XVIII/17, as per the agreed text, could mean to defer consideration of Parties’ non-compliance status but not to redefine the level of consumption or production.

18. Regarding the excess quantity of CFCs in 2006, it was pointed out above that the current system of administrative orders for controlling the movement of CFCs in India is legally prohibiting movement of any CFCs to the market unless proper domestic sale quotas or export licenses are issued by the Ozone Cell. In light of this fact, India would like to refer to Dec. XV/39.

19. According to Dec. XV/39 which is related to the illegally traded quantity of CFCs, the Parties decided that such a quantity should not be counted against a Party’s consumption provided that the Party does not place it on its own market. Paras. 4 and 6 of Dec. XVI/27 seem to suggest that such a quantity or part of it would be considered as consumption when it is withdrawn from the stock and made available to its own market.

20. India places serious concern on the issue of CFC stockpile and attempts to preempt recurrence of this issue in the future.
21. Regarding the excess of the quantities actually consumed in 2006 and 2007, India would like to request the ExCom to consider, in light of the intent of para.1 of Dec. XVIII/16, not to invoke the penalty clause on these quantities which represent the excess consumption in the MDI sector.

Action Plan to Return to Compliance with the Consumption Sector Agreement in 2008 – 2009

22. **Action Plan** – To ensure compliance with the consumption sector agreement in the future years, India agrees to take a holistic approach to manage CFCs in both the production and consumption sectors by focusing on these two areas:

   a) Inter-linkage between production and consumption; and
   b) CFC management plan to support CFC phase-out in the servicing sector and the MDI sector.

23. **Policy Measures** – To address those issues effectively, the following policy measures will be put in place in an expeditious manner:

   a) Amendment of the consumption schedule of the Ozone Rules in line with the ExCom agreement;
   b) Establishment of a system to ensure future years production and domestic consumption quotas are well coordinated;
   c) Imports of CFCs for the MDI sector will be treated consistently under the existing CFC licensing system; and
   d) Strengthening of the system for monitoring movement of CFC stocks and imports, if any.

24. As part of the effort to amend the Ozone Rules as described above, the Government of India will take this opportunity to explore possibility of incorporating the recent adjustments of the Montreal Protocol pertaining to control measures on HCFCs to the Ozone Rules.

25. **Industry Action** – CFC producers are expected that they will properly manage or dispose of any CFC stockpile remaining at the end of 2009. CFC producers also agree to undertake an accelerated CFC production phase-out by limiting their CFC production from 1 January – 31 July 2008 to 690 MT, which is the combined consumption limits of 2008 and 2009 stipulated in the consumption agreement of the Excom, provided that additional funding, above and beyond the funding level of the consensus agreement for the CFC production sector, is provided by the MLF. The proposed funding level is is discussed in the subsequent sections of this report.

26. **Inter-linkage Between the Production and Consumption Sectors** – Recognizing the consumption limits as per the consumption agreement, India will ensure that:
a) Total consumption of CFCs in 2008 and 2009 will be within the limits of the consumption sector agreement;
b) Any new production of CFCs as mentioned in the above paragraph will only be used to meet residual demand;
c) In case CFC demand for the MDI sector is less than the 690 MT level, the balance from the 2008 – 2009 consumption limits could be used for meeting the demand in the servicing sector.

27. In addition, the Government of India will step up the implementation recovery and recycling activities under the consumption sector project. India will also step up its effort to promote adoption of the good practices in the refrigeration and air-conditioning servicing sectors to reduce refrigerant leakage.

28. CFC Management – As previously mentioned, any CFC stockpile remaining at the end of 2009 will be properly managed or disposed of by CFC producers. To allow CFC producers to implement a proper CFC management plan in a cost-effective manner, predictability of the CFC demand in the MDI sector is very critical. The quantity required by the MDI sector in 2008 and 2009 will determine the level of CFCs for the servicing sector that could be drawn from the existing stock. It will also determine the levels of CFC exports for 2008 and 2009 to minimize the costs of managing unwanted CFCs at the end of 2009. In this regard, it is agreed that:

a) As CFC production will cease in July 2008, MDI producers would provide their CFC demand for 2008 and 2009 to the Government of India by May 2008;
b) Production and domestic sale quotas of newly produced CFCs and stockpiled CFCs would be issued accordingly; and

Accelerated CFC Production Phase-out

29. In supporting India to return to compliance with the consumption sector agreement, the Indian CFC producers confirm their continued commitments to the production limits as stipulated in the consensus agreement for the CFC production sector and agree to adopt an accelerated production phase-out schedule provided that additional funding, in addition to the amounts already agreed to under the consensus agreement, is provided by the MLF.

30. The following options are being proposed for the consideration of the ExCom:

1. Accelerated phase-out CFC production for the domestic market only;
2. Accelerated production phase-out with additional production of up to 690 MT for the MDI sector, by 31 July 2008;
   a. Compensation based on ExCom’s established practice for the production sector project; and
   b. Compensation based on the option immediately above and a revised loss profit calculation methodology.
Option 1: Accelerated Phase-out of CFC Production for the Domestic Market

31. The objective of this option is to ensure that the quantities of CFC to be placed in the domestic market in 2008 and 2009 would be equal to the levels of consumption as per the consumption agreement. Under this option, the maximum levels of CFC production in 2008 and 2009 as agreed to by the consensus agreement remain unchanged. The production schedule for 2008 and 2009 is shown in Table 6.

<table>
<thead>
<tr>
<th>Production Schedule</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Targets as per the Consensus Agreement</td>
<td>2,259.0</td>
<td>1,130.0</td>
</tr>
<tr>
<td>Production Targets for the Domestic Sales</td>
<td>417.0</td>
<td>273.0</td>
</tr>
<tr>
<td>Production Targets for the Export Market</td>
<td>1,842.0</td>
<td>857.0</td>
</tr>
<tr>
<td>Production for Stocks</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6 Production Schedule for 2008 and 2009

32. Under this option, the targets as per the consensus agreement could be utilized in full. Therefore, no additional funding requirements are being proposed to support CFC production phase-out. To ensure full compliance with the above production schedule, the Government of India will pursue rigorously its existing monitoring and control system to ensure that the quantity produced within the calendar year is fully mobilized for the domestic and export markets within the same calendar year.

33. The strengthened control system would require increasing man-power from the Government of India. However, additional costs to be incurred from this increasing administrative burden will be borne by the funding already made available to the institutional strengthening project and through the funding provided for the technical assistance component of the CFC production closure project.

Option 2: Accelerated CFC Production Phase-out – Loss Profit

34. Given that the current commercial environment of the CFC market in 2008 is significantly different than the conditions prevailing in 1999, the Indian CFC producers believe that to reflect this difference the ExCom may wish to accommodate some key adjustments to certain basic parameters in order to accurately capture the true incremental costs incurred by this proposed accelerated production closure.

35. Since the total quantity of CFCs to be produced is very limited in comparison to the overall operations of the facilities, production of CFCs could be considered as marginal utility of the existing facilities whereby no additional maintenance and overheads are incurred. Based on this circumstance, costs of labor, maintenance, and SARE, should be excluded from the production costs. Therefore, the production cost is US $0.84 per kg.
36. Under the current conditions in India, the domestic prices of CFC-11 and CFC-12 are substantially higher than the international prices. Therefore, to accurately capture incremental costs of early closure loss profit should be determined on the basis of projected contributions from both domestic and export markets. The current weighted domestic price, based on sell contribution of 90% CFC-12 and 10% CFC-11, is US $11.18 per kg (excluding taxes). With the proposed cap of 690 MT for the domestic market in 2008 and 2009, the reduction in the domestic sale volume is determined by the difference between the proposed cap and the consumption level stipulated in the Ozone Rules.

37. With regard to the international prices, CFC producers in India reported that during the past few years their export market has shifted to pharmaceutical-grade CFCs. Moreover, it is anticipated that international prices of CFCs for other applications would also continue to rise due to limited supply of CFCs in the global market. Therefore, it is proposed that an international price of pharmaceutical-grade CFCs be used for evaluating the loss profit from international sale contributions. The current international price of pharmaceutical-grade CFCs is US $7.50 per kg.

38. Based on these revised parameters, the total loss profit is equal to US $20.38 million. CFC producers are proposing this option as the one to be considered and approved by the MLF.

<table>
<thead>
<tr>
<th>Production Schedule</th>
<th>2008</th>
<th>2009</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Targets as per the Consensus Agreement</td>
<td>2259</td>
<td>1130</td>
<td>MT</td>
</tr>
<tr>
<td>Ozone Rules Consumption Limit</td>
<td>668</td>
<td>668</td>
<td>MT</td>
</tr>
<tr>
<td>Proposed Production Targets for Consumption Sector</td>
<td>690</td>
<td>0</td>
<td>MT</td>
</tr>
<tr>
<td>Allowable Production Level for Export</td>
<td>1591</td>
<td>462</td>
<td>MT</td>
</tr>
<tr>
<td>Reduction of Production for the Consumption Sector</td>
<td>0</td>
<td>646</td>
<td>MT</td>
</tr>
<tr>
<td>Reduction of Production for Export</td>
<td>1591</td>
<td>462</td>
<td>MT</td>
</tr>
<tr>
<td>Loss of Profit from Domestic Sales</td>
<td>0</td>
<td>6,706</td>
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<tr>
<td>Loss of Profit from Export</td>
<td>$10,598</td>
<td>$3,077.52</td>
<td>000's US$</td>
</tr>
</tbody>
</table>

Table 8 Loss of Profit Calculation for Option 2

Cost Effectiveness of the Accelerated CFC Production Closure

39. The proposed accelerated CFC production closure would reduce production levels of the consensus agreement by 2,699 MT or ODP ton during the last 18 months before the complete phase-out obligation of enters into force. Table 11 summarizes the loss profit and cost-effectiveness of all the options considered above.
### Option Compensation

<table>
<thead>
<tr>
<th>Option</th>
<th>Compensation (US $ million)</th>
<th>Cost-effectiveness (US $/ODP kg)</th>
</tr>
</thead>
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<tr>
<td>2</td>
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<td>7.55</td>
</tr>
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</table>

Table 9 Summary of Loss Profits and Cost-effectiveness of all Options

### Project Monitoring and Milestones

<table>
<thead>
<tr>
<th></th>
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<td>Commercial Commitments from MDI producers</td>
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<td>Verification of 2008 Production</td>
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</table>

Table 10 Project Monitoring Milestones

### Conclusion

40. From 1 August 2008, CFC production will be prohibited. This represents the closure of the last CFC production facilities in Article 5 country Parties to the Montreal Protocol. Therefore, total CFC production amounting to 2,699 MT will be avoided. Moreover, the plan of action as submitted by India will ensure that the total aggregated CFC consumption in India from the period 2004 – 2009 will not exceed 6,150 MT, which is 2,820 MT lower than the aggregated consumption level as per the consumption agreement, and about 7,400 MT less than the Montreal Protocol target.

### Consumption Targets

<table>
<thead>
<tr>
<th>Consumption Targets</th>
<th>MP</th>
<th>Ozone Rules</th>
<th>NCCOPP (GTZ)</th>
<th>Actual/Planned</th>
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<tbody>
<tr>
<td>2004</td>
<td>6,681</td>
<td>3,875</td>
<td>3,489</td>
<td>2,242</td>
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<tr>
<td>2005</td>
<td>3,341</td>
<td>3,341</td>
<td>2,265</td>
<td>1,958</td>
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<tr>
<td>2006</td>
<td>3,341</td>
<td>2,205</td>
<td>1,560</td>
<td>3,411</td>
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<td>2007</td>
<td>1,002</td>
<td>1,002</td>
<td>964</td>
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<td>2008</td>
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<td>2009</td>
<td>1,002</td>
<td>668</td>
<td>273</td>
<td>273</td>
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<td>2010</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Aggregated Consumption</td>
<td>16,368</td>
<td>11,759</td>
<td>8,969</td>
<td>6,147</td>
</tr>
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</table>

Table 11 Summary of Impact of the Proposed Plan of Action and Accelerated Production Closure
ANNEX

DECISIONS OF THE PARTIES TO THE MONTREAL PROTOCOL

Decision XV/39

The Fifteenth Meeting of the Parties decided:

1. To recall that in its decision XIV/23 the Fourteenth Meeting of the Parties noted that Nepal’s baseline for Annex A, group I substances is 27 ODP-tonnes. Nepal reported consumption of 94 ODP-tonnes of Annex A, group I substances in 2000 and consumption of 94 ODP-tonnes of Annex A, group I substances for the consumption freeze control period of 1 July 2000 to 30 June 2001. As a consequence, for the July 2000 – June 2001 control period Nepal was in non-compliance with its obligations under Article 2A of the Montreal Protocol;

2. To note that Nepal has subsequently reported that 74 ODP-tonnes of imports of CFCs have been detained by its customs authorities as the shipment lacked an import license, and that Nepal therefore wished to report the quantity as illegal trade under the terms of decision XIV/7;

3. To congratulate Nepal on its actions in seizing the shipment and in reporting the fact to the Secretariat;

4. To note also, however, that paragraph 7 of decision XIV/7 provides that “the illegally traded quantities should not be counted against a Party’s consumption provided the Party does not place the said quantities on its own market”;

5. To conclude, therefore, that if Nepal decides to release any of the seized quantity of CFCs into its domestic market, it would be considered to be in non-compliance with its obligations under Article 2A of the Montreal Protocol and would therefore be required to fulfill the terms of decision XIV/23, including submitting to the Implementing Committee a plan of action with time-specific benchmarks to ensure a prompt return to compliance;

6. To request the Implementation Committee to review the situation of Nepal at its next meeting.

Decision XVI/27

The Sixteenth Meeting of the Parties decided:

1. To note that Nepal ratified the Montreal Protocol and the London Amendment on 6 July 1994. Nepal is classified as a Party operating under paragraph 1 of Article 5 of the Protocol and had its country programme approved by the Executive Committee in 1998. The Executive Committee has approved US$ 53,636 from the Multilateral Fund to enable compliance in accordance with Article 10 of the Protocol;
2. To recall that in its decision XV/39, the Fifteenth Meeting of the Parties had congratulated Nepal on seizing 74 ODP tonnes of imports of CFCs that had been imported in 2000 without an import license, and on reporting the quantity as illegal trade under the terms of decision XIV/7;

3. To recall that, in paragraph 5 of decision XV/39, the Parties had stated that, if Nepal decided to release any of the seized quantity of CFCs on to its domestic market, it would be considered to be in non-compliance with its obligations under Article 2A of the Montreal Protocol and would therefore be required to fulfill the terms of decision XIV/23, including submitting to the Implementation Committee a plan of action with time-specific benchmarks to ensure a prompt return to compliance;

4. To clarify the meaning of paragraph 5 of decision XV/39 to mean that Nepal would only be considered to be in non-compliance if the amount of CFCs released on to the market in any one year exceeded its permitted consumption level under the Protocol for the year;

5. To note further that Nepal’s baseline for CFCs is 27 ODP tonnes;

6. To note with appreciation Nepal’s submission of its plan of action to manage the release of the seized CFCs, and to note further that, under the plan, Nepal specifically commits itself;

   a. To release no more than the following amount of CFCs in each year as follows:

      i. 27.0 ODP tonnes in 2004;
      ii. 13.5 ODP tonnes in 2005;
      iii. 13.5 ODP tonnes in 2006;
      iv. 4.05 ODP tonnes in 2007;
      v. 4.05 ODP tonnes in 2008;
      vi. 4.00 ODP tonnes in 2009;
      vii. Zero in 2010, save for essential uses that may be authorized by the Parties;

   b. To monitor its existing system for licensing imports of ozone-depleting substances, including quotas, introduced in 2001, which includes a commitment not to issue import licenses for CFCs, in order to remain in compliance with its plan of action;
c. To report annually on the quantity of CFCs released pursuant to paragraph 6 (a) above;

d. To ensure that any quantities of CFCs remaining after 2010 are not released on to its market except in compliance with Nepal’s obligations under the Montreal Protocol;

7. To note that the measures listed in paragraph 6 above will enable Nepal to remain in compliance;

8. To monitor closely the progress of Nepal with regard to the implementation of its plan of action and the phase-out of CFCs.

**Decision XVIII/16**

The Eighteenth Meeting of the Parties decided:

1. To request the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol to consider as a matter of urgency the funding of projects in relation to those Parties operating under paragraph 1 of Article 5 that experience difficulties due to high consumption of chlorofluorocarbons for manufacturing metered-dose inhalers, in order to facilitate the transition from chlorofluorocarbon-based metered-dose inhalers;

2. To request the Executive Committee to consider within the context of the existing Multilateral Fund guidelines to review its decision 17/7 with regard to the existing cut-off date for consideration of metered-dose inhaler conversion project consistent with the reality of the pace of technological advances in the metered-dose inhaler sector;

3. To request the Implementation Committee under the Non-compliance Procedure of the Montreal Protocol to consider all possible options on how to address the potential non-compliance difficulties of some Parties operating under paragraph 1 of Article 5 resulting from their high proportion of chlorofluorocarbon consumption in the metered-dose inhaler sector;

4. To further request the Implementation Committee to give special consideration to the situation of such Parties, in particularly in the context of paragraph 4 of the non-compliance procedure of the Protocol, in the light of information received from the Parties concerned and having due regard to health consideration;

5. To consider again the matter referred to in paragraphs 3 and 4 at the Twentieth Meeting of the Parties in 2008;

6. To request the Executive Committee to consider including on the agenda of the United Nations Environment Programme thematic regional workshops, information to clarify the steps required to advance the transition from chlorofluorocarbon metered-dose inhalers;
7. To request each Party not operating under paragraph 1 of Article 5 receiving essential-use exemptions for the production or import of chlorofluorocarbons to manufacture metered-dose inhalers for export to Parties operating under paragraph 1 of Article 5 to submit to each importing Party a detailed export manufacturing transition plan for each manufacturer where the exports of an active ingredient to that Party exceed 10 metric tonnes, specifying the actions that each manufacturer is taking and will take to transition its exports to chlorofluorocarbon-free metered-dose inhalers as expeditiously as possible in a manner that does not patients at risk;

8. That each manufacturer’s export manufacturing transition plans should include specific details of each of the manufacturer’s export markets and for each metered-dose inhaler by active ingredient concerning:

   a. Timing of submission to the health authority of marketing applications for chlorofluorocarbon-free alternatives, expected approval and launch of such alternatives and withdrawal of associated chlorofluorocarbon product or products;

   b. Indicative information on facilitative pricing, licensing and/or technology transfer arrangements under consideration;

   c. Contribution to, and participation in, programmes for educating health care professionals, government health authorities and patients about the transition to chlorofluorocarbon-free treatments for asthma and chronic obstructive pulmonary disease;

9. Consistent with decision IV/25 and paragraph 4 of decision XII/2, to request each Party referred to in paragraph 7 of the present decision, when deciding whether to nominate essential-use volumes for and/or grant essential-use licenses to a manufacturer, to take into account the manufacturer’s efforts to implement its export manufacturing transition plan and its contribution to transition towards chlorofluorocarbon-free metered-dose inhalers;

10. To request each Party referred to in paragraph 7 to submit each year to the Technology and Economic Assessment Panel, as part of the Party’s essential-use nomination, a report summarizing the export manufacturing transition plans submitted, taking care to protect any confidential information;

11. To request the Technology and Economic Assessment Panel to consider such reports in its assessment of each Party’s essential-use nominations;

12. To request the Technology and Economic Assessment Panel to assess and report on progress at the Twenty-Seventh Meeting of the Open-ended Working Group and to report to the Nineteenth Meeting of the Parties on the need for, feasibility of, optimal timing of, and recommended quantities for a limited campaign production of chlorofluorocarbons exclusively for metered-dose inhalers in both
Parties operating under paragraph 1 of Article 5 and Parties not operating under paragraph 1 of Article 5.

Decision XVIII/17

The Eighteenth Meeting of the Parties decided:

1. To note that the Secretariat has reported that Parties which had exceeded the allowed level of production or consumption of a particular ozone-depleting substances in a given year have in some cases explained that their excess production or consumption represented one of the following scenarios:
   
   a. Ozone-depleting substance production in that year which had been stockpiled for domestic destruction or export for destruction in a future year;
   
   b. Ozone-depleting substance production in that year which had been stockpiled for feedstock use or export for that use in a future year;
   
   c. Ozone-depleting substance production in that year which had been stockpiled for export to meet basic domestic needs of developing countries in a future year;
   
   d. Ozone-depleting substances imported in that year which had been stockpiled for domestic feedstock use in a future year;

2. To recall that the Implementation Committee under the Non-compliance Procedure of the Montreal Protocol had concluded that scenario (d) was, in any event, in conformity with the provision of the Montreal Protocol and decisions of the Meeting of the Parties;

3. To request the Secretariat to maintain a consolidated record of the cases in which the Parties have explained that their situations are the consequence of scenarios (a), (b) or (c), and incorporate that record in the documentation of the Implementation Committee, for information purposes only, as well as in the Secretariat’s report on data submitted by the Parties in accordance with Article 7 of the Protocol;

4. To recognize that new scenarios not covered by paragraph 1 will be addressed by the Implementation Committee in accordance with the non-compliance procedure of the Protocol and the established practice thereunder;

5. To agree to revisit this issue at the Twenty-first Meeting of the Parties, in the light of the information gathered in accordance with paragraph 3 of the present decision, with a view to considering the need for further action.
DECISIONS OF THE EXECUTIVE COMMITTEE

Decision 49/29

The Executive Committee decided:

a. To note the verification of the 2005 work programme of the India CTC phase-out plan provided by the World Bank;

b. To approve the 2006 annual work programme at a total cost of US $10,755,313 plus associated support cost of US $889,148, and the subsequent distribution between the World Bank and the bilateral and multilateral agencies of US $9,556,267 plus US $716,720 as support cost for the World Bank; US $500,000 plus US $85,000 as support costs for France; US $300,000 plus US $57,500 as support costs for Germany; and US $399,046 plus US $29,928 as support cost for UNIDO;

c. To request the World Bank to ensure that the verification of the 2006 work programme examined the 801 metric tonnes of increased CTC stock in 2005 and to report on its use in 2006;

d. To note that the approval of the 2006 annual programme and associated funding was without prejudice to any decisions that might be taken by the Meeting of the Parties regarding compliance issues arising from the treatment of ozone-depleting substances produced and stockpiled for use as feedstock in future years;

e. That, should the Meeting of the Parties take a decision on the issue of the treatment of ozone-depleting substances produced and stockpiled for use as feedstock in future years, the Executive Committee would consider the relevance of that decision with respect to India’s CTC phase-out arrangement and take action as appropriate;

f. To request the Government of India and the World Bank to take into account any future decision by the Meeting of the Parties concerning the treatment of ozone-depleting substances produced and stockpiled for use as feedstock in future years when implementing and reporting on the India CTC phase-out agreement; and

g. To request that, in future annual programmes of the CTC phase-out plan, the breakdown of CTC consumption would include the quantities used for the process agent sector and process agent applications.
 Decision 52/39

The Executive Committee decided:

a. To request the World Bank to continue monitoring the movement within the carbon tetrachloride (CTC) inventory held by both the producers and feedstock users, as part of the annual verification exercise, in order to account for total CTC production and imports;

b. To authorize using the flexibility provided for under the agreement between India and the Executive Committee of the Multilateral Fund for the phase-out of ozone-depleting substances, approved by decision 41/95, to allow funds to be used to cover all relevant sectoral consumption, on the understanding that that would not change existing Executive Committee guidelines for determining eligible incremental costs for consumption and production;

c. To request the World Bank to provide an impact assessment of the annual work programmes by agency and by sector; and

d. To approve the 2007 annual work programme at a total funding level of US $4,820,938 with US $444,070 as support costs. The distribution by agency would be: US $4,020,938 plus US $301,570 as support costs for the World Bank; US $500,000 plus US $85,000 as support costs for France; and US $300,000 plus US $57,500 as support costs for Germany.